

ABSTRACT OF THE DISCLOSURE

A video decoder (10) for receiving an input video signal and producing output signals for a digital display (12), and involving automatic gain control (AGC) functions (20, 28), is disclosed. For each of the front-end and back-end AGC functions (20, 28), the AGC gain value applied is modified according to measurements of several attributes of the video signal, such as sync height, color burst amplitude, composite signal peak amplitude, and luma signal peak amplitude. The measurements are made, and the AGC gains are modified, on a frame-by-frame basis. Preferably, the AGC is modified using the one of the signal attributes that indicates the lowest gain. The back-end AGC function (28) modifies its gain to unity if the front-end AGC function (20) selected the luma signal peak amplitude for modifying its gain. A method for adjusting the rate of change of the AGC gain is also disclosed, in which gain increases are delayed and slowed following an AGC gain decrease because of an image-dependent signal attribute.